COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
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DRAFT, 2018

Ms. Leslie Hartz
VP Pipeline Construction
Atlantic Coast Pipeline, LLC
707 E. Main Street
Richmond, VA 23219

Location: Buckingham County
Registration No.: 21599

Dear Ms. Hartz:

Attached is a permit to construct and operate a natural gas compressor station in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on July 13, 2018 and solicited written public comments by placing a newspaper advertisement in the Farmville Herald on August 8, 2018. A public hearing was held on September 11, 2018. The required comment period, provided by 9VAC 5-80-1170 D expired on September 11, 2018.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to construct and operate shall not relieve Atlantic Coast Pipeline, LLC of the responsibility to comply with all other local, state, and federal permit regulations. Disposal of any condensate collected during natural gas pipeline operations or maintenance must be done in accordance with the applicable solid waste requirements.

Certain emission units authorized by this permit are subject to 40 CFR 60, New Source Performance Standard (NSPS), Subparts Dc and KKKK. Virginia has accepted delegation of these rules. In summary, the unit is required to comply with certain federal emission standards and operating limitations. The Department of Environmental Quality (DEQ) advises you to review the referenced NSPS to ensure compliance with applicable emission and operational limitations. As the owner/operator you are also

Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

PROCESS REQUIREMENTS

1. **Emission Controls** – Nitrogen oxides (NOx) emissions from the compressor turbines (CT-01 – CT-04) shall be controlled by dry low NOx (SoLoNOx) combustion control technology and selective catalytic reduction (SCR). The SoLoNOx technology shall be in operation at all times the respective compressor turbine is operating except during start-up and shutdown. When a compressor turbine's inlet air temperature is less than 0ºF, the SoLoNOx technology must be operated to maximum extent possible, following the manufacturer's written protocol or best engineering practices for minimizing emissions. No compressor turbine may operate below 50% load except during startup and shutdown. Each compressor turbine shall be equipped with Cold Weather Control Logic to minimize emissions when inlet air temperature is less than 0ºF and shall be in operation when the respective compressor turbine is operating. Each SCR shall be in operation at all times the respective compressor turbine is operating, except during start-up and shutdown where operation shall be as described in Condition 4.e .
(9VAC 5-80-1180 and 9VAC 5-50-260)

2. **Emission Controls –** Carbon Monoxide (CO) and Volatile Organic Compound (VOC) emissions from the compressor turbines (CT-01 – CT-04) shall be controlled by an oxidation catalyst system. Each oxidation catalyst system shall be provided with adequate access for inspection and shall be in operation at all times the respective compressor turbine is operating, except during each unit start-up. An oxidation catalyst system shall be considered in operation when the catalyst bed inlet gas temperature is above 490ºF.
(9VAC 5-80-1180 and 9VAC 5-50-260)

3. **Emission Controls –** Particulate emissions (PM, PM10, PM2.5) from the compressor turbines (CT-01 – CT-04) shall be controlled by inlet air filtering. Each filter shall be provided with adequate access for inspection and shall be in operation at all times the respective compressor turbine is operating.
(9VAC 5-80-1180 and 9VAC 5-50-260)

4. **Emission Controls –** The permittee shall operate and maintain each compressor turbine, all air pollution control equipment, and all monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during start-up, shutdown, and malfunction.

    a. For the purpose of this permit, start-up is defined as the period beginning with the first fuel fed to the compressor turbine and ending when the compressor turbine reaches 50% load.

    b. For the purpose of this permit, shutdown is defined as the period beginning when the compressor turbine drops below 50% load for the purpose of ceasing operation and ends when fuel feeding stops.

a. The permittee shall develop, maintain, and implement an approved~~a~~ fugitive emission component monitoring and repair plan. In developing this plan, the definition of "fugitive emissions component" shall be the same as contained in 40 CFR 60.5430a. This plan shall consist of a daily auditory/visual/olfactory (AVO) inspection program for all fugitive emissions components. The plan shall also consist of a quarterly leak detection survey. A leaking fugitive emissions component for the purpose of the quarterly survey shall be an instrument reading of 500 ppm or more using Method 21 or an optical gas imaging camera. The instrument utilized must be maintained, calibrated, and operated in accordance with Method 21 and the manufacturer's specifications. The initial survey shall be conducted no later than 60 days after the facility start-up with subsequent surveys conducted no less frequently than every calendar quarter. Consecutive surveys shall be no less than 60 days apart.

b. The first attempt to repair any fugitive emissions component found to be leaking during an AVO inspection or a quarterly survey shall be made as soon as practicable but no later than 3~~5~~ days after discovery. The leaking fugitive emissions component shall be repaired within 15 days of discovery. The permittee shall maintain a list of difficult to repair fugitive emissions components, which when leaking, the repair requires facility shutdown or cannot otherwise be completed within 15 days of discovery; documentation justifying the inclusion of a fugitive emissions component on the list shall be included. If a leak is found that will emit more natural gas than the required shutdown, the shutdown shall occur and the leak be repaired. If a leak is found that will emit less natural gas than a facility shutdown, repair may be delayed until the next facility shutdown unless the emissions from the total delayed repairs would exceed the emissions of the required shutdown. Records of the daily AVO inspection results, repair attempts, and the list of long-term leaking fugitive emissions components and reason for each delay shall be maintained on site.

c. The monitoring plan shall be submitted to the Piedmont Regional Office for review no later than 60 days prior to start-up of the facility.

d. The fugitive emissions components on the VGRS shall be part of the daily AVO and quarterly leak detection survey.

e. A summary of the results of the daily AVO and quarterly LDAR surveys shall be submitted with the quarterly reports required in Condition 4~~5~~ detailing leaks detected, any corrective actions taken to address and minimize the leaks, and the dates of leak discovery and leak repair.

(9VAC 5-80-1180 and 9VAC 5-50-260)

8. **Monitoring Devices –** Each compressor turbine (CT-01 – CT-04) shall be equipped with devices to continuously measure and record compressor turbine inlet air temperature, compressor turbine load, and pilot operating mode. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures that shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the compressor turbine is operating.
(9VAC 50-80-1180 and 9VAC 5-50-20 C)

in the method of operation of the four compressor turbines (CT-01, CT-02, CT-03, and CT-04) and emergency engine (EG-01) and may require a new or amended permit.
(9VAC 5-80-1180)

15. **Fuel –** The pipeline natural gas shall not exceed a sulfur content of 1.1 grains of sulfur per 100 standard cubic feet at any time.
(9VAC 5-80-1180)

16. **Fuel Monitoring** – The permittee shall use the fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying ~~that~~ the maximum VOC content and total sulfur content for the natural gas being fired at the natural gas compressor station facility. The total sulfur content must be shown to be ~~is~~ 1.1 grains of sulfur or less per 100 standard cubic feet. In the alternative, the permittee may perform annual fuel analysis of on-site natural gas. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office no later than 60 days after test completion and shall conform to a~~the~~ test report format approved by the Piedmont Regional Office~~enclosed with this permit~~.
(9VAC 5-80-1180 and 9VAC 5-50-410)

17. **Operating Hours –** The emergency engine (EG-01) shall be operated for the purposes of maintenance, testing, and emergencies (as defined in 9VAC5-80-1110C) only. The emergency engine (EG-01) shall not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC 5-80-1180 and 9VAC 5-50-260)

18. **Requirements by Reference** – Except where this permit is more restrictive than the applicable requirement, the compressor turbines (CT-01 through CT-04) as described in the Introduction shall be operated in compliance with the requirements of 40 CFR 60, Subpart KKKK.
(9VAC 5-80-1180, 9VAC 5-50-400 and 9VAC 5-50-410)

EMISSION LIMITS

19. **Emission Limits** – Emissions from the operation of the emergency engine (EG-01) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	2.0 g/hp-hr	0.60 tons/yr
Carbon Monoxide	4.0 g/hp-hr	2.40 tons/yr
Volatile Organic Compounds	1.0 g/hp-hr	0.60 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of

27. **Visible Emission Limit –** Visible emission observations from compressor turbines (CT-01, CT-02, CT-03, and CT-04) shall be conducted at least once a week. If visible emissions are observed, the permittee shall take timely corrective action such that the equipment resumes operation with no visible emissions or perform a visible emission evaluation (VEE) in accordance with 40 CFR 60,Appendix A, Method 9 to assure visible emissions from the emission unit is less than five (5) percent opacity. A record of the date, time, observer, cause and corrective measures taken shall be made. If no visible emissions were observed, a record of the date, time and observer shall be made. These records shall be maintained on site by the permittee for the most recent 5-year period. (9VAC 5-80-1180)

TESTING

28. **Emissions Testing –** The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports, safe sampling platforms, and access shall be provided when requested.
(9VAC 5-50-30 F and 9VAC 5-80-1180)

29. **Stack Test –** Initial performance tests shall be conducted for NOx, CO, VOC, PM10, and PM2.5 from each compressor turbine (CT-01 – CT-04) to determine compliance with the emission limits contained in Conditions 20, 21, 22, and 23. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 40CFR Part 51 Appendix M or 9 VAC 5-50-410. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

30. **Stack Test –** Initial performance tests shall be conducted for NOx, CO, and VOC from the emergency engine (EG-01) to determine compliance with the emission limits contained in Condition 19. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

31. **Stack Test –** The permittee shall repeat the performance tests contained in Condition 29 every two years. Subsequent tests shall be performed no later than 26 months after the previous test. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office no later than 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

32. **Stack Test –** The permittee shall repeat the performance tests contained in Condition 30 every 8,760 hours of operation or 36 months, whichever is earlier. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office no later than 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

33. **Visible Emissions Evaluation –** Concurrently with the initial performance tests in Conditions 29 and 30 and subsequent performance tests in Conditions 31 and 32, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The initial test shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

34. **VGRS Evaluation** - The permittee shall ensure proper operation and maintenance of the pressurized hold required in Condition 6.d by performing an evaluation for each compressor turbine by quantitative analysis of leaks during a pressurized hold using Method 21 or an optical gas imaging camera. The seal gas pressure and the compressor turbine case pressure shall be monitored during this evaluation to ensure continued proper operation of the VGRS and shall form acceptable ranges for on-going operation. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The initial evaluation shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Subsequent annual evaluations shall be performed, reported, and demonstrate compliance thereafter at a period not to exceed 13 months from the preceding evaluation. One copy of the test results shall be submitted to the Piedmont

Regional Office no later than 60 days after test completion, ~~The test report~~ shall conform to a~~the~~ test report format approved by the Piedmont Regional Office,~~enclosed with this permit~~ and shall include the established pressure ranges.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

CEMS

35. **CEMS** - Continuous Emission Monitoring Systems, meeting the design specifications of 40 CFR Part 60, Appendix B, shall be installed to measure and record the emissions of nitrogen oxides (NOx) and the oxygen content of the exhaust gas from each compressor turbine stack as ppmvd corrected to 15% O_2. Except where otherwise approved by the Piedmont Regional Office, the CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 60.13, 40 CFR 60, Subpart KKKK and 40 CFR 60, Appendices B and F. Data shall be reduced to 3-hour rolling averages, using procedures approved by the Piedmont Regional Office.
(9VAC5-80-1180 and 9VAC5-50-40)

36. **CEMS Performance Evaluations** - Performance evaluations of the CEMS shall be conducted in accordance with 40 CFR Part 60, Appendix B, and shall take place during the performance tests required by Conditions 29 and 31 or within 30 days thereafter. One copy of the performance evaluations report shall be submitted to the Piedmont Regional Office within 45 days of the evaluation. The CEMS shall be installed and operational prior to conducting initial performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of the CEMS performance, and subsequent notifications, shall be submitted to the Piedmont Regional Office.
(9VAC5-80-1180 and 9VAC5-50-40)

37. **CEMS Quality Control Program** - A CEMS quality control program which is equivalent to the requirements of 40 CFR 60.13 and 40 CFR 60 Appendix F shall be implemented for all continuous emissions monitoring systems.
(9VAC5-80-1180 and 9VAC5-50-40)

38. **CEMS Reports** - The permittee shall furnish written reports to the Piedmont Regional Office of excess emissions from any process monitored by a CEMS with the quarterly report required in Condition 45. These reports shall include, but are not limited to the following information:

    a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

    b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

c. The date(s) and time(s) identifying each period during which the CEMS was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

d. When no excess emissions have occurred or the CEMS have not been inoperative, repaired or adjusted, such information shall be stated in that report.

(9VAC5-80-1180 and 9VAC5-50-50)

39. **Emissions Monitoring Plan** - The permittee shall develop, maintain, and implement an approved monitoring plan for carbon monoxide (CO) and volatile organic compounds (VOC) to ensure ongoing compliance with emissions limits in Conditions 20 through 23. The plan shall include, at a minimum, the procedures to be used for initial validation and calibration of the monitoring equipment, the procedures to be used during monitoring, and the corrective actions that will be taken to address and minimize excess emissions identified by monitoring.
(9VAC5-80-1180)

40. **Emissions Monitoring Period**– Upon completion of the initial performance test required in Condition 29, CO and VOC monitoring for each compressor turbine (CT-01 – CT-04) in accordance with Condition 39 shall occur once every 720 hours of operation (no less than 400 hours of operation apart). After completion of 24 monitoring events for a compressor turbine, the Piedmont Regional Office may approve a reduced frequency for that compressor turbine to quarterly monitoring (no less than 1 calendar month apart), or semiannual monitoring (no less than 4 calendar months apart) upon written request by the permittee.
(9VAC5-80-1180)

41. **Emissions Monitoring Reporting** - A report providing, at a minimum, the calibration results, monitoring results, excess emissions identified, and corrective actions taken to address and minimize the excess emissions shall be provided to the Piedmont Regional Office within 30 days after monitoring event completion.
(9VAC5-80-1180)

ADDITIONAL REQUIREMENTS

42. **Ambient Air Quality Monitoring** - The permittee shall conduct ambient air monitoring for NO_2 and PM2.5 beginning upon startup of the facility. No later than 180 days prior to startup of the facility, the permittee shall submit an Ambient Air Quality Monitoring Quality Assurance Project Plan (QAPP) for approval by DEQ. The Quality Assurance Project Plan shall be developed consistent with the requirements of EPA's "Guide to Writing Quality Assurance Project Plans for Ambient Air Monitoring Networks" (EPA-454/8-18-006). The permittee shall not certify ambient monitoring data without an approved QAPP. The plan shall include, at a minimum, all the elements described in EPA-454/8-18-006 in addition to the following elements:

a. Description of the site selection process for air quality and meteorological monitors;

b. Description of procedures for all aspects of the operation of monitoring equipment including maintenance, data processing, data validation, data reporting and data certification. These

procedures shall be developed consistent with the requirements described in EPA's "Guidance for Preparing Standard Operating Procedures (SOPs)" (EPAQA/G-6). The SOPs shall be submitted for approval along with the QAPP.

c. All monitoring and associated tasks shall conform to, at a minimum, the applicable requirements of 40 CFR Parts 50, 53, and 58, and any other requirements specified by DEQ.

d. Performance Evaluations (PE) for all monitoring equipment installed consistent with these conditions shall be performed by the permittee or their designated representative. These PEs shall be performed consistent with the requirements of 40 CFR Part 58, Appendix A Section 3. Results of the PEs shall be submitted to DEQ 3 months after the performance date of the PE. The permittee shall be responsible for submitting the results of the PE to the EPA Air Quality Subsystem database. If the PE does not meet the requirements of 40 CFR Part 58 section 3, DEQ shall be notified prior to the submittal of the data to the AQS database. This notification is to include any remedial action taken or planned to be taken by the permittee to bring the system into compliance with the requirements of 40 CFR Part 58, Section 3.

e. A plan for making the collected data available to the public subject to DEQ's approval. This information shall be included in the QAPP.

DEQ will approve the monitoring location(s) based on EPA's siting criteria and the proximity to the maximum modeled impact from the compressor station for each pollutant in consultation with local interested stakeholders.
(9VAC5-80-1180)

43. **Ambient Air Quality Monitoring** - The permittee will perform sampling for Volatile Organic Compounds, using TO-15 or an equivalent method approved by DEQ, once for the initial representative pig launch venting event, pig receiving venting event, compressor turbine shutdown venting event, and during the initial performance test required in Condition 30. Sampling shall be performed prior to and concurrent with each event and the test. Details of the sampling shall be arranged with and approved by the Piedmont Regional Office and the Office of Air Quality Monitoring. The permittee shall submit a protocol at least 30 days prior to sampling. The timing of the sampling shall occur through the entire length of the event and test. Results of each sampling event shall be submitted to the Piedmont Regional Office within 30 days after monitoring event completion
(9VAC5-80-1180)

RECORDS AND REPORTING

~~35.~~44. **On Site Records –** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with and approved by the Piedmont Regional Office. These records shall include, but are not limited to:

a. Monthly and annualconsumption of natural gas for each unit at the facility. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for

the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

b. Operation and control device monitoring records as required in Conditions 6, 7, 8, 9, 10, 11, 12, and 16.

c. Records for each event when a compressor turbine does not operate in "~~minimum pilot mode~~SoLoNOx mode" shall include event duration, event reason, and annual hours. Annual hours shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

d. Documentation from Solar for all parameters and their ranges that are relevant to the SoLoNOx mode determination

~~d.~~e. Records of fuel quality characteristics to demonstrate compliance with Condition 16.

~~e.~~f. Monthly emissions calculations for NOx, CO, VOC, PM10, and PM2.5 from each unit at the facility using calculation methods approved by the Piedmont Regional Office to demonstrate compliance with the annual emission limitations in Conditions 19, 20, 21, 22, 23, and 24.

~~f.~~g. Scheduled and unscheduled maintenance and operator training.

~~g.~~h. Records of actual piping pressure prior to venting gas from that section of piping, the clock time for the opening and closing of any vent valve, the amount of gas vented during the event, and any mitigation measures used. These records include the ESD testing, venting of natural gas due to pigging events, compressor turbine start-up purge, and compressor turbine shutdown venting.

~~h.~~i. Records of the time, date, and duration of each compressor turbine start-up and shutdown event.

~~i.~~j. Records of the operating time and reason for each operation of the emergency engine (EG-01)

~~j.~~k. Results of all stack test data, VGRS evaluations, and visible emissions evaluations.

l. CEMS calibrations, calibration checks, percent operating time, and excess emissions.

m. The occurrence and duration of any periods during which a CEMS is inoperative.

n. VOC and CO Emissions Monitoring Plan and monitoring data and reports required in Conditions 39, 40, and 41.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC 5-80-1180 and 9VAC 5-50-50)

~~36.~~45. **Reporting** - The permittee shall submit a certification of compliance with all terms and conditions of this permit, including emission limitation standards or work practices, as well as any other applicable requirement to DEQ no later than February~~March~~ 1, May 1, August 1, and Nov~~S~~e~~pte~~mber 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-20-220. The time periods to be addressed are each calendar quarter of the year. The initial report shall be submitted for the calendar quarter in which startup of the facility occurred.~~January 1 to June 30 and July 1 to December 31.~~ Each report shall include the following information:

a. Exceedances of emissions limitations or operational restrictions;

b. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring; and

c. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

d. Summary results of the daily AVO and quarterly LDAR surveys required in Condition 7.

e. Excess emission monitoring reports required in Condition 38.

If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this quarterly~~semi-annual~~ reporting period." These reports shall be maintained and shall be current for the most recent five years.
(9VAC 5-80-1180 and 9VAC 5-50-50)

NOTIFICATIONS

~~37.~~46. **Initial Notifications –** The permittee shall furnish written notification to the Piedmont Regional Office of:

a. The actual date on which construction of the natural gas compressor station commenced within 30 days after such date.

b. The anticipated start-up date of the natural gas compressor station postmarked not more than 60 days nor less than 30 days prior to such date.

c. The actual start-up date of the natural gas compressor station within 15 days after such date.

d. The anticipated date of performance tests postmarked at least 30 days prior to such date.

e. Copies of the written notification referenced in items 46.a through 46.d above are to be sent to:

* Limit does not apply during periods of start-up, shutdown, or when ambient temperatures are below 0ºF

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 2, 4, 5, ~~7,~~ 17, 58, 59, and 61.
(9VAC 5-60-320, 9VAC 5-80-1180, and 9VAC 5-80-1120F)

~~48.~~57. **(SOE) Emission Limits** – Hexane (CAS# 110-54-3) emissions from venting events at the facility shall not exceed the limits specified below:

CT-01	0.87 lb/hr
CT-02	0.37 lb/hr
CT-03	0.97 lb/hr
CT-04	0.19 lb/hr
Pig Receiving	2.62 lb/event
Pig Launching	2.51 lb/event

Compliance with these limits may be determined as stated in Conditions 6, 7, and 61.
(9VAC 5-60-320, 9VAC 5-80-1180, and 9VAC 5-80-1120F)

~~49.~~58. **Stack Test** – Concurrently with the performance tests in Condition 29 and 31, initial performance tests shall be conducted for formaldehyde from each compressor turbine (CT-01 – CT-04) to determine compliance with the emission limits contained in Conditions 56. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-60-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-60-100. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility and shall conform to the test report format enclosed with this permit.
(9VAC 5-60-30, 9VAC 5-80-1180, and 9VAC 5-80-1120F)

~~50.~~59. **Stack Test** – Concurrently with the performance tests in Conditions 30 and 32, initial performance tests shall be conducted for formaldehyde from the emergency engine (EG-01) to determine compliance with the emission limit contained in Condition 56. The tests shall be performed,

reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-60-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-60-100. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility and shall conform to the test report format enclosed with this permit.
(9VAC 5-60-30, 9VAC 5-80-1180, and 9VAC 5-80-1120F)

60. **(SOE) Fuel Monitoring** – The permittee shall use the fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying that the maximum hexane content for the natural gas being fired at the natural gas compressor station facility. In the alternative, the permittee may perform annual fuel analysis of on-site natural gas. The details of the tests are to be arranged with and approved by the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Regional Office no later than 60 days after test completion and shall conform to a test report format approved by the Piedmont Regional Office.
(9VAC5-80-1180 and 9VAC5-80-1120F)

~~51.~~61. **(SOE) On Site Records –** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with and approved by the Piedmont Regional Office. These records shall include, but are not limited to the hourly, monthly, and annual emissions (in pounds and tons) of formaldehyde and hexane. The permittee shall calculate the amount of hexane exhausted during any venting event. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Records of performance test and fuel analysis results shall be maintained. These records shall be available for inspection by DEQ and current for at least the most recent five years.
(9VAC 5-60-50, 9VAC 5-80-1180, and 9VAC 5-80-1120F)